



## Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact [support@jstor.org](mailto:support@jstor.org).

*Rowley-ragg.* 7. Ancient porphyritic lava, containing numerous crystals of hornblende, from Vesuvius. 8. A specimen of tufa, or volcanic mud, also from Vesuvius.

The author infers from his analysis that phosphoric acid is a very usual component part of volcanic rocks, and is a principal source of the remarkable fertility possessed by soils derived from their disintegration.

---

May 2, 1844.

The MARQUIS OF NORTHAMPTON, President, in the Chair.

1. "Ranges of the Barometer and Sympiesometer on board H.M.S. 'Alfred,' in the River Plate, between the 1st of July and the 31st of December, 1843." Communicated by Captain Beaufort, R.N., F.R.S.

This paper is a register of the results of daily observations of the heights of the barometer, sympiesometer and thermometer, the direction of the wind, and state of the weather during the above period.

2. "Remarks on the amalgamation of Silver Ores in Mexico; with an account of some new combinations of Copper, Oxygen and Chlorine." By John Christian Bowring, Esq. Communicated by S. Hunter Christie, Esq., Sec. R.S.

The process employed in Mexico for amalgamating ores containing sulphurets of silver, and which consists in adding to them a solution of bichloride of copper with chloride of sodium, is explained by Sonneschmidt, Humboldt, and Boussingault, on the supposition that a chloride of silver is formed at the same time that the sulphur combines with the copper. The author calls in question the truth of this theory, and proposes certain modifications of the process by the employment of a combination of deutoxide of copper with the bichloride, until an oxy-chloride is formed, and then adding finely precipitated copper, by which a salt of a brick-red colour is obtained, insoluble in water, and at a temperature of 200° Fahr. speedily reducing sulphuret of silver to the metallic state.

3. "Experimental evidence in support of the secretion of Carbon by animals." By Robert Rigg, Esq., F.R.S.

The author finds that the mean of the results of different experimentalists as to the quantity of carbon excreted by respiration from adults, during twenty-four hours, is 5963 grains; whereas the weight of the carbon contained in the whole of the food, both solid and liquid, received into the body during the same period, as ascertained by the analysis of each article of diet, made by the author, falls very short of that quantity; varying in different cases from 3002 to 4800 grains. The same inference is drawn from experiments made on a mouse, weighing 181 grains, confined in a wire trap for twenty-eight days; during which time it consumed food containing 544.5 grains of carbon, and gave out, in the respired air,

741·2 grains of carbon, being 196·7 grains more than it had received; and it had also gained in absolute weight 27 grains. The conclusion which the author deduces from these experiments is, that carbon is actually formed or secreted by animals.

---

May 9, 1844.

JAMES WALKER, Esq., V.P., in the Chair.

“On the Hyssop of Scripture.” By J. F. Royle, M.D., F.R.S., &c.

Many attempts have at different times been made, by various authors, to identify the plant which, in our authorized version of the Scriptures, is translated *Hyssop*. The author enters at large into the history of the speculations of former writers on this subject; and after an elaborate investigation, is led to the conclusion that this plant is the *Capparis spinosa* of Linnæus, or Caper plant, a shrub abundantly met with in the south of Europe, where it appears to be indigenous, and also generally on the islands and coasts of the Mediterranean, as well as in Lower Egypt and in Syria.

---

May 16, 1844.

The MARQUIS OF NORTHAMPTON, President, in the Chair.

1. “On the Measurement of Distances by the Telescope.” By Edmund Bowman, Esq., C.E. Communicated by S. Hunter Christie, Esq., Sec. R.S.

The method proposed by the author for determining distances by means of a telescope, consists in placing, at the spot of which the distance is required, a graduated staff, and observing the number of its divisions comprehended in the field of the telescope, or included between fixed points in a diaphragm placed in the focus of the eyeglass. He finds that the number of these divisions, apparent in the field of view, are directly as the distance of the staff, plus a certain constant, which depends on the construction of the instrument. The author investigates the value of this constant, and illustrates the practical applications of his method, which he thinks might be employed with great advantage in surveying, when, from irregularities of ground or difficulties of access, the direct measurement by the chain would be inconvenient or impossible.

2. “An Account of some Experiments exhibiting new instances of the Absorbing Power of Streams; with a few remarks on the Pulsation of Jets.” By Mr. G. Robinson. Communicated by W. Bowman, Esq., F.R.S.

The experiments of which an account is given in this paper